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JUL 03 2001

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Complete if Known

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TECH CENTER 1600/2900

Filing Date	April 2, 2001
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First Named Inventor	Ikemoto et al.
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Group Art Unit	1625
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Examiner Name	Unassigned
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Attorney Docket Number	210485
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Sheet	1	of	1
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U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER - NON PATENT LITERATURE DOCUMENTS

OTHER - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No**

Raymond Conybe

Date Considered 12/21/01

- * A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).
+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

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PATENT
Attorney Docket No.: 27698/00-601
FORM 1449
Page 1 of 1

FORM PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Attorney Docket No.: 27698/00-601	
	Applicant(s): Berlin et al.	
	Title: Heteroarotinoids containing urea or thiourea linker	
	Serial No.: 09/824,547	Filing Date: 04/02/2001
	Group: 1626	Examiner: Unknown

U.S. PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name	Class/Subclass
<i>h</i>	AA	4,826,984	05/1989	Berlin et al.	C07D 307/79
<i>k</i>	AB	4,833,254	05/1989	Berlin et al.	C07D 405/10
<i>h</i>	AC	4,975,455	12/1990	Brion et al.	A61K 31/35
<i>h</i>	AD	4,977,276	12/1990	Berlin et al.	C07D 333/54
<i>h</i>	AE	5,006,550	04/1991	Chandraratna	A61K 31/35
<i>h</i>	AF	5,252,342	10/1993	Howell et al.	A61K 33/24
<i>h</i>	AG	6,054,467	04/2000	Gjerset	A01N 43/42
<i>h</i>	AH	6,110,960	08/2000	Janusz et al.	A61K 31/38
<i>k</i>	AI	6,121,245	09/2000	Firshein	A61K 31/70
<i>h</i>	AJ	6,121,263	09/2000	Brown	A61K 31/53

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 Attorney Docket No.: 27698/00-601
 FORM 1009
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FOREIGN PATENT DOCUMENTS

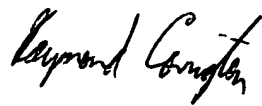
Examiner Initials		Document No.	Date	Name	Class / Subclass	Translation
K	AK	FR 2 390 428	08/1978	Loeliger	C 07 C 175/00	No
K	AL	GB 2 119 801 A	11/1983	Klaus et al.	C 07 D 215/02	
K	AM	EP 0 130 795 A2	01/1985	Hoffman et al.	C 07 D 311/58	
K	AN	WO 85/00806	02/1985	Dawson et al.	C 07 C 69/78	
K	AO	EP 0 350 846 A2	01/1990	Klaus et al.	C 07 D 311/58	No
K	AP	EP 0 405 028 A1	01/1991	Chandraratna	C 07 D 335/06	
K	AQ	WO 98/07716	02/1998	Berlin et al.	C 07 D 311/58	

OTHER ART

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
K	AR	K. D. Berlin. Biologically Active Heteroarotinoids Exhibiting Anticancer Activity and Decreased Toxicity. <i>Journal of Medicinal Chemistry</i> ; 1997, 40(22); 3567-3583.
K	AS	K. D. Berlin. Synthesis and Characterization of Heteroarotinoids Demonstrate structure Specificity Relationships. <i>Journal of Medicinal Chemistry</i> ; 1998, 41(19); 3753-3757.

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
<i>ke</i>	AT	A. Dhar, S. Liu, J. Klucik, K. D. Berlin, M. M. Madler, S. Lu, R. T. Ivey, D. Zacheis, C. W. Brown, E. C. Nelson, P. J. Birckbichler, and D. M. Benbrook. Synthesis, Structure-Activity Relationships, and RARγ-Ligand Interactions of Nitrogen Heteroarotinoids. <i>Journal of Medicinal Chemistry</i> ; 1999, 42(18); 3602-3614.
<i>ke</i>	AU	H. Kagechika, E. Kawachi, Y. Hashimoto, T. Himi and K. Shudo. "Rebinobenzoic Acids. 1. Structure--Activity Relationships of Aromatic Amides with Retinoidal Activity" . <i>Journal of Medicinal Chemistry</i> ; Vol 31, 1988; 2182-2192.
<i>ke</i>	AV	U. Pastorino, R. P. Warrell, Jr., F. Formelli. "Clinical Pharmacology of the Retinoids" . <i>Retinoids in Oncology</i> , 1995, pg. 55-64.
<i>ke</i>	AW	L. W. Spruce, S. N. Rajadhyaksha, K. D. Berlin, J. B Gale, E. T. Miranda, W. T. Ford, E. C. Blosssey, A. K. Verma, M. B. Hossain, D. van der Helm, and T. R. Breitman. "Heteroarotinoids. Synthesis, Characterization, and Biological Activity in Terms of an Assessment of these Systems to Inhibit the Induction of Ornithine Decarboxylase Activity and to Induce Terminal Differentiation of HL-60 Cells" . <i>Journal of Medicinal Chemistry</i> ; 1987, 30; 1174-1480.
<i>ke</i>	AX	L. W. Spruce, J. B. Gale, K. D. Berlin, A. K. Verma, T. R. Breitman, X. Ji, and D. van der Helm. "Novel Heteroarotinoids: Synthesis and Biological Activity" . <i>Journal of Medicinal Chemistry</i> ; 1991, 34; 430-439.
<i>ke</i>	AY	K. M. Waugh, K. D. Berlin, W. T. Ford, E. M. Holt, J. P. Carrol, P. R. Schomber, and L. J. Schiff. "Synthesis and Characterization of Selected Heteroarotinoids - Pharmacological Activity as Assessed in Vitamin A Deficient Hamster Tracheal Organ Cultures - Single Crystal X-ray Diffraction Analysis of 4,4-Dimethylthiochrom-6-yl Methyl Ketone-1,1-Dioxide and Ethyl (E)-p-[2-(4,4-Dimethylthiochroma-6-yl)propenyl]benzoate" . <i>Journal of Medicinal Chemistry</i> ; 1985, 28; 116-124.

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
	AZ	W. J. Welsh, V. Cody, K. Suwinska, K. D. Berlin, S. N. Radjadhya, S. Subramanian, and A. K. Verma. "Heteroarotinoids; Crystal and Molecular Structure Analysis of Methyl (Z)- and Methyl (E)-4-[2-(4,4-Dimethylthiochroman-6-yl)-1-propenyl]benzoate" . <i>Structural Chemistry</i> ; 1991, 2; 515-522.
	BA	D. Zacheis, A. Dhar, S. Lu, M. M. Madler, J. Klucik, C. W. Brown, S. Liu, F. Clement, S. Subramanian, G. M. Weerasekare, K. D. Berlin, M. A. Gold, J. R. Houck, Jr., K. R. Fountain, and D. M. Benbrook. Heteroarotinoids Inhibit Head and Neck Cancer Cell Lines in Vitro and in Vivo Through Both RAR and RXR Retinoic Acid Receptors. <i>Journal of Medicinal Chemistry</i> ; 1999, 42(21); 4434-4445.

EXAMINER	DATE CONSIDERED
	12/21/01

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet	1	of	1
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Application Number	09/824,447
Filing Date	April 2, 2001
First Named Inventor	Ikemoto et al.
Group Art Unit	1625
Examiner Name	Unassigned
Attorney Docket Number	210485

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Raymond C. Cray

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